Please amend claims 1, 3, 7, 9, 11, 13, 14, 17, 19, 23, 25, 27, 29, 30, 34, 36, 37, 39 and 41, as indicated below.

1. (Currently Amended) A method for communicating in a distributed computing environment, comprising:

receiving a message in a data representation language from a source to be sent to a destination, wherein said source is a client in the distributed computing environment and said destination is a service in the distributed computing environment;

receiving a data representation language schema, wherein said data representation language schema defines a message interface for accessing the service;

generating a message endpoint for the client according to said data representation language schema, wherein said message endpoint performs:

verifying type correctness of said message according to a said data representation language schema; and

attaching an authentication credential to said message, wherein said authentication credential identifies said ~~source~~ client; and

sending said message to said ~~destination~~ service.

2. (Canceled).

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3. (Currently Amended) The method as recited in claim 2 1, wherein said data representation language schema defines a set of messages in the data representation language that said client may send to said service to access said service.

4. (Original) The method as recited in claim 3, further comprising said message endpoint for the client verifying that said message to be sent to said service complies with a data representation language message definition from said data representation language schema.

5. (Original) The method as recited in claim 3, further comprising said client obtaining from said message endpoint the set of data representation language messages that said client may send to said service.

6. (Original) The method as recited in claim 3, wherein said set of messages in the data representation language that said client may send to said service is a subset of all messages that can be handled by said service so that said client's access to said service is restricted.

7. (Currently Amended) The method as recited in claim 2 1, further comprising:

said message endpoint for the client receiving a data representation language message from said service, wherein said data representation language message from said service includes an authentication credential for said service;

said message endpoint for the client using said authentication credential for said service to authenticate said data representation language message from said service as being from said service; and

said client obtaining, from said message endpoint for said client, the authenticated message from said service.

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8. (Original) The method as recited in claim 7, wherein said data representation language schema defines a set of messages that said service may send to said client, the method further comprising said message endpoint for the client verifying the correctness of said data representation language message from said service according to said data representation language schema.

9. (Currently Amended) The method as recited in claim 2 1, further comprising binding said message endpoint for the client to a single destination address so that said message endpoint only sends messages to said destination address.

10. (Original) The method as recited in claim 9, wherein said destination address is a Uniform Resource Identifier (URI) for said service, wherein said sending said message to a destination comprises sending said message to an address specified by said URI using a protocol specified by said URI.

11. (Currently Amended) The method as recited in claim 2 1, wherein said message endpoint for the client is a single atomic unit of program code that provides an abstraction for said service to said client.

12. (Original) The method as recited in claim 11, wherein said single atomic unit of program code is generated under control of said client's execution environment.

13. (Currently Amended) The method as recited in claim 2 1, wherein once generated said message endpoint for the client cannot be altered as to said verifying type correctness and said attaching an authentication credential.

14. (Currently Amended) The method as recited in claim 2 1, wherein said client comprises a client process and wherein said service comprises a service process, and wherein said client process is executable under a different type of execution environment than said service process.

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15. (Original) The method as recited in claim 1, wherein said data representation language is eXtensible Markup Language (XML).

16. (Original) The method as recited in claim 1, wherein said source is a service in the distributed computing environment and said destination is a client in the distributed computing environment, the method further comprising generating a message endpoint for the service according to a data representation language schema, wherein said verifying type correctness and said attaching an authentication credential are performed by said message endpoint for the service, and wherein said data representation language schema defines a message interface between said service and said client.

17. (Currently Amended) A device, comprising:

a processor;

a memory coupled to said processor comprising program instructions, wherein the program instructions are configured to implement:

a message gate unit configured to:

receive a message in a data representation language from a source to be sent to a destination, wherein said source is a process executed by said processor from said memory, wherein said source is a client process in a distributed computing environment and said destination is a service in the distributed computing environment;

receive a data representation language schema, wherein said data representation language schema defines a message interface for accessing the service;

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generate said message gate unit according to said data representation language schema, wherein said message gate unit is configured to:

verify type correctness of said message according to a said data representation language schema; and

attach an authentication credential to said message, wherein said authentication credential identifies said source; and

send said message to said destination.

18. (Canceled).

19. (Currently Amended) The device as recited in claim 18 17, wherein said data representation language schema defines a set of messages in the data representation language that said client process may send to said service to access said service.

20. (Original) The device as recited in claim 19, wherein said message gate unit is further configured to verify that said message to be sent to said service complies with a data representation language message definition from said data representation language schema.

21. (Original) The device as recited in claim 19, wherein said client process is configured to obtain from said message gate unit the set of data representation language messages that said client process may send to said service.

22. (Original) The device as recited in claim 19, wherein said set of messages in the data representation language that said client process may send to said service is a subset of all messages that can be handled by said service so that said client process's access to said service is restricted.

23. (Currently Amended) The device as recited in claim ~~18~~ 17, wherein said message gate unit for the client is further configured to:

receive a data representation language message from said service, wherein said data representation language message from said service includes an authentication credential for said service;

use said authentication credential for said service to authenticate said data representation language message from said service as being from said service; and

wherein said client process is configured to obtain, from said message gate unit for said client, the authenticated message from said service.

24. (Original) The device as recited in claim 23, wherein said data representation language schema defines a set of messages that said service may send to said client process, wherein said message gate unit for the client is further configured to verify the correctness of said data representation language message from said service according to said data representation language schema.

25. (Currently Amended) The device as recited in claim ~~18~~ 17, wherein said message gate unit for the client process is bound to a single destination address so that said message gate unit only sends messages to said destination address.

26. (Original) The device as recited in claim 25, wherein said destination address is a Uniform Resource Identifier (URI) for said service, wherein said message gate unit is further configured to send said message to an address specified by said URI using a protocol specified by said URI.

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27. (Currently Amended) The device as recited in claim ~~18~~ 17, wherein said message gate unit for the client is a single atomic unit of program code executed by said processor that provides an abstraction for said service to said client process.

28. (Original) The device as recited in claim 27, wherein said device is configured so that said single atomic unit of program code is generated under control of device's execution environment.

29. (Currently Amended) The device as recited in claim ~~18~~ 17, wherein said message endpoint for the client is configured so that once generated said message endpoint for the client cannot be altered as to verifying type correctness and attaching the authentication credential.

30. (Currently Amended) The device as recited in claim ~~18~~ 17, wherein said client process is executable under a different type of execution environment than a service process for said service.

31. (Original) The device as recited in claim 17, wherein said data representation language is eXtensible Markup Language (XML).

32. (Original) The device as recited in claim 17, wherein said source is a service process in a distributed computing environment and said destination is a client in the distributed computing environment, the device further configured to generate said message gate unit for the service according to a data representation language schema, and wherein said data representation language schema defines a message interface between said service and said client.

33. (Original) The device as recited in claim 17, wherein said device is a computer system, mobile telephone, or personal digital assistant.

34. (Currently Amended)   A carrier medium comprising program instructions, wherein the program instructions are computer-executable to implement:

receiving a message in a data representation language from a source to be sent to a destination, wherein said source is a client in a distributed computing environment and said destination is a service in the distributed computing environment;

receiving a data representation language schema, wherein said data representation language schema defines a message interface for accessing the service;

generating a message endpoint for the client according to said data representation language schema, wherein said message endpoint performs:

verifying type correctness of said message according to a said data representation language schema;

attaching an authentication credential to said message, wherein said authentication credential identifies said source; and

sending said message to said destination.

35. (Canceled).

36. (Currently Amended)   The carrier medium as recited in claim 35 34, wherein said data representation language schema defines a set of messages in the data representation language that said client may send to said service to access said service, and wherein the program instructions are further computer-executable to implement:

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said message endpoint for the client verifying that said message to be sent to said

service complies with a data representation language message definition

from said data representation language schema.

37. (Currently Amended) The carrier medium as recited in claim ~~35~~ 34, wherein

the program instructions are further computer-executable to implement:

said message endpoint for the client receiving a data representation language

message from said service, wherein said data representation language

message from said service includes an authentication credential for said

service;

said message endpoint for the client using said authentication credential for said

service to authenticate said data representation language message from

said service as being from said service; and

said client obtaining, from said message endpoint for said client, the authenticated

message from said service.

38. (Original) The carrier medium as recited in claim 37, wherein said data

representation language schema defines a set of messages that said service may send to

said client, and wherein the program instructions are further computer-executable to

implement:

said message endpoint for the client verifying the correctness of said data

representation language message from said service according to said data

representation language schema.

39. (Currently Amended) The carrier medium as recited in claim ~~35~~ 34, wherein

the program instructions are further computer-executable to implement:

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binding said message endpoint for the client a single destination address so that said message endpoint only sends messages to said destination address.

40. (Original) The carrier medium as recited in claim 39, wherein said destination address is a Uniform Resource Identifier (URI) for said service, and wherein, in said sending said message to a destination, the program instructions are further computer-executable to implement:

sending said message to an address specified by said URI using a protocol specified by said URI.

41. (Currently Amended) The carrier medium as recited in claim 35 34, wherein said message endpoint for the client is a single atomic unit of program code that provides an abstraction for said service to said client.

42. (Original) The carrier medium as recited in claim 34, wherein said data representation language is eXtensible Markup Language (XML).

43. (Original) The carrier medium as recited in claim 34, wherein said source is a service in the distributed computing environment and said destination is a client in the distributed computing environment, and wherein the program instructions are further computer-executable to implement:

generating a message endpoint for the service according to a data representation language schema, wherein said verifying type correctness and said attaching an authentication credential are performed by said message endpoint for the service, and wherein said data representation language schema defines a message interface between said service and said client.

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